

Application No.: 10/620,474

In Response to Notice of Allowance dated: July 26, 2010

This Amendment Under 37 C.F.R. § 1.312 dated: October 21, 2010

CLAIMS

Please amend Claim 19 as shown in the Listing of the Claims that follows.

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LISTING OF THE (AMENDED) CLAIMS

11. (Previously Presented) A method of assessing voice quality of a communication system using a voice analysis platform comprising:

transmitting reference speech samples into said communication system;

receiving said reference speech samples captured at one or more processing points within a gateway of said communication system; and

determining voice quality scores based on said captured reference speech samples using said voice analysis platform, said transmitting and said receiving performed by said voice analysis platform.

12. (Previously Presented) The method of Claim 11 further comprising displaying said voice quality scores graphically using said voice analysis platform.

13. (Original) The method of Claim 12 wherein said displaying occurs by way of a graphical user interface.

14. (Cancelled)

15. (Previously Presented) The method of Claim 11 further comprising determining and displaying statistical information related to said voice quality scores using said voice analysis platform.

16. (Original) The method of Claim 15 wherein said statistical information comprises an average voice quality score and a variance.

17. (Original) The method of Claim 11, wherein said gateway comprises a voice over IP gateway.

18. (Cancelled)

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19. (Currently Amended) A system for monitoring degradation of voice quality in a communication system comprising:

a first voice analysis platform; and

a second voice analysis platform, said first and said second voice analysis platforms used for transmitting and receiving reference speech[[],] through said communication system, said communication system comprising a plurality of signal processing elements used to process said reference speech, wherein a network interface is used to communicatively couple the outputs of said plurality of signal processing elements to said first voice analysis platform or said second voice analysis platform, wherein a reference speech sample obtained at an output of a signal processing element of said plurality of signal processing elements is transmitted through said network interface to said first voice analysis platform or said second voice analysis platform, said reference speech sample obtained at said output being been used to compute a voice quality score at said first voice analysis platform or said second voice analysis platform, wherein at least one of said first voice analysis platform and said second voice analysis platform receives said obtained reference speech sample at said output, said reference speech originating not only from said first voice analysis platform but alternatively from said second voice analysis platform.

20. (Previously Presented) The system of Claim 19 wherein said signal processing element comprises a codec.

21. (Previously Presented) The system of Claim 19 wherein said signal processing element comprises a voice activity detector.

22. (Previously Presented) The system of Claim 19 wherein said signal processing element comprises an echo canceller.

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23. (Previously Presented) The system of Claim 19 wherein said signal processing element comprises a packetizer.

24. (Previously Presented) The system of Claim 19 wherein said signal processing element comprises a jitter buffer.

25. (Previously Presented) The system of Claim 19 wherein said signal processing element comprises a comfort noise generator.

26. (Previously Presented) The system of Claim 19 wherein said voice quality score comprises PESQ.

27. (Previously Presented) The system of Claim 19 wherein said voice quality score comprises PAMS.

28. (Previously Presented) The system of Claim 19 wherein said voice quality score comprises PSQM.

29. (Previously Presented) The system of Claim 19 wherein said first voice analysis platform comprises a software module, said software module comprising software that provides configuration data to a gateway, said gateway comprising said one or more signal processing elements, said configuration data used in selecting said output from said outputs for computing said voice quality score at said first voice analysis platform or said second voice analysis platform.

30. (Previously Presented) A system for monitoring degradation of voice quality in a communication system comprising:

a voice analysis platform for transmitting and receiving reference speech through said communication system, said communication system comprising a plurality of signal processing

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elements used to process said reference speech, said voice analysis platform receiving a reference speech sample from an output of a signal processing element of said plurality of signal processing elements, said reference speech originating from said voice analysis platform, said reference speech sample transmitted to said voice analysis platform via a network interface, said network interface used for communicatively coupling said signal processing element to said voice analysis platform, said reference speech sample used to compute a voice quality score.

31. (Previously Presented) The system of Claim 30 wherein said signal processing element comprises a codec.

32. (Previously Presented) The system of Claim 30 wherein said signal processing element comprises a voice activity detector.

33. (Previously Presented) The system of Claim 30 wherein said signal processing element comprises an echo canceller.

34. (Previously Presented) The system of Claim 30 wherein said signal processing element comprises a packetizer.

35. (Previously Presented) The system of Claim 30 wherein said voice quality score comprises PESQ.

36. (Previously Presented) The system of Claim 30 wherein said voice quality score comprises PAMS.

37. (Previously Presented) The system of Claim 30 wherein said voice quality score comprises PSQM.

38. (Previously Presented) The system of Claim 30 wherein said signal processing element comprises a jitter buffer.

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39. (Previously Presented) The system of Claim 30 wherein said one or more signal processing elements comprises a comfort noise generator.

40. (Previously Presented) The system of Claim 30 wherein said voice analysis platform comprises a software module, said software module comprising software that provides configuration data to a gateway, said gateway comprising said one or more signal processing elements, said configuration data used in determining said selected output from one or more outputs corresponding to said one or more signal processing elements.

41. (Previously Presented) A method of assessing voice quality at various points along a communication system comprising:

transmitting a reference speech between a first voice analysis platform and a second voice analysis platform via at least one gateway;

monitoring an output of a plurality of signal processing elements of said at least one gateway;

transmitting a reference speech sample from said output to said first voice analysis platform or said second voice analysis platform; and

using said reference speech sample to generate a voice quality score by said first voice analysis platform or said second voice analysis platform, wherein at least one of said first voice analysis platform and said second voice analysis platform receives said reference speech sample at said output, said reference speech originating not only from said first voice analysis platform but alternatively from said second voice analysis platform.

42. (Previously Presented) The method of Claim 41 further comprising displaying said voice quality score graphically.

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43. (Previously Presented) The method of Claim 42 wherein said displaying occurs by way of a graphical user interface.

44. (Previously Presented) The method of Claim 41 further comprising determining and displaying statistical information related to said voice quality score.

45. (Previously Presented) The method of Claim 44 wherein said statistical information comprises an average voice quality score and one or more variances.

46. (Previously Presented) The method of Claim 41 wherein said voice quality score is generated using a PESQ algorithm.

47. (Previously Presented) The method of Claim 41 wherein said voice quality score is generated using a PAMS algorithm.

48. (Previously Presented) The method of Claim 41 wherein said voice quality score is generated using a PSQM algorithm.

49. (Previously Presented) The method of Claim 11 wherein said one or more processing points comprises a codec.

50. (Previously Presented) The method of Claim 11 wherein said one or more processing points comprises a voice activity detector.

51. (Previously Presented) The method of Claim 11 wherein said one or more processing points comprises an echo canceller.

52. (Previously Presented) The method of Claim 11 wherein said one or more processing points comprises a packetizer.

53. (Previously Presented) The method of Claim 11 wherein said one or more processing points comprises a jitter buffer.

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54. (Previously Presented) The method of Claim 11 wherein said one or more processing points comprises a comfort noise generator.